

MAR 5 1974



# CITY OF HOPE NATIONAL MEDICAL CENTER

1500 EAST DUARTE ROAD • DUARTE, CALIFORNIA 91010 • (213) 359-8111

DIVISION OF NEUROSCIENCES

March 4, 1974

Dr. Joshua Lederberg  
Department of Genetics  
Stanford University Medical School  
Stanford, CA 94305

Dear Dr. Lederberg:

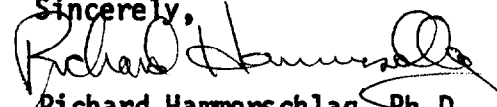
I am working with a group of scientists here at City of Hope and within the American Chemical Society who are concerned over what may be a Defense Department interest in human genetic polymorphisms.

As you may be aware, an article entitled "Ethnic Weapons," written by Carl A. Larson (Head of the Department of Human Genetics at the Institute of Genetics, University of Lund, Sweden), appeared in the journal Military Review in November, 1970. The article proposes that differences in gene frequencies between ethnic groups might serve as a basis for designing a new class of chemical warfare agents, ones that would possess a capability of incapacitating or killing a targeted "enemy" population to a greater extent than a pre-selected population of "friendly" forces. While it appears that the overwhelming proportion of known gene frequencies argue against the feasibility of such hypothetical chemical warfare agents, we are nevertheless concerned that those ideas are being discussed within military circles, and that the Department of Defense has been funding large-scale screenings of various Asian populations for frequencies of genetic markers.

These studies have been funded by the Advanced Research Projects Agency, (most have been carried out at the Naval Medical Research Unit on Taiwan), under ARPA order 580 (for example, see Biochim. Biophys. Acta., 229:343-348 [1971]). Since this same agency funds the JASON Group, we wondered whether you might be aware of any discussions within JASON or ARPA of this concept of "ethnic" chemical weapons. We would also appreciate it if you might suggest any approaches we might pursue to find out the rationale for ARPA funding of these studies.

Please understand that it is not my intent to imply that you may have any personal involvement in these matters. It is, however, my belief that the concept of ethnic weapons raises serious issues for the morality of scientific research, and I hope you may be able to help us shed some light on this question.

Sincerely,

  
Richard Hammerschlag, Ph.D.  
Division of Neurosciences

RH/mlc